

REMARKS

INTRODUCTION

In view of the following remarks, reconsideration of the allowability of the claims is respectfully requested.

Claims 1-18 are pending in the subject application.

REJECTION UNDER 35 USC 103

Claims 1-3, 10 and 16-18 stand rejected under 35 USC § 103 as being obvious over Ravdin et al., U.S. Patent No. 5,862,304, in view of Smyth, U.S. Patent No. 5,465,321, and claims 4-9 and 11-15 stand rejected under 35 USC § 103 as being obvious over Ravdin et al. and Smyth, in view of Abrams et al., U.S. Patent No. 6,117,066. These rejections are respectfully traversed.

Although applicant disagrees with the Examiner's obviousness conclusion, the following remarks are primarily directed toward the Examiner's legal conclusion that the particular claimed features should not be given patentable weight since they are recited in the preambles of the independent claims. The previous remarks from the Response filed September 10, 2003, regarding the non-obviousness of the proffered combination are incorporated herein by reference, and applicant maintains support of the same.

Preamble Includes Limiting Recitations

The Advisory Action issued October 6, 2003, sets forth that the particularly claimed "predicting the occurrence of an abnormal event" or "predicting an abnormality of a dynamic system" are not positively recited in the body of the independent claims, and therefore have not been given patentable weight.

In particular, the Advisory Action sets forth that a particular citation, In re Van Geuns, 26 USPQ2d 1057 (Fed. Cir. 1993), supports the rationale that "limitations [from] the specification are not read into the claims...The Examiner finds the independent claims 1, 16, 17 and 18 include the limitation of 'predicting an abnormality of a dynamic system' in the preamble," and presumptively will not give the recitation patentable weight solely based on the same.

However, in In re Van Geuns, the Federal Circuit did consider claim language in the preamble of the claim in question, but gave the claimed recitation the broadest scope, in view of

the claim as a whole. Id at 1059. The Federal Circuit merely pointed out that the narrowed interpretation argued in court, of narrowing the particular claimed language to be applicable only to a narrow field of the corresponding invention, was not proper since the general language of "uniform magnetic field" can be broadly interpreted regardless of the focus of the underlying disclosure and invention. It is noted here that this term "uniform magnetic field," from the respective preamble, was considered and given patentable weight by the Court and underlying Board.

In re Van Geuns is not applicable in the presently claimed invention as the claimed feature in the preamble "predicting an abnormality of a dynamic system" is not something that can be simply interpreted. Rather, this preamble claim language requires a particular operation to occur or be available to occur, i.e., regardless of the interpretation proffered by the Examiner, the independent claims, each as a whole, must accommodate this claim language. The requirement of "predicting an abnormality of a dynamic system" is limiting over other systems that either don't predict abnormalities or those that are only predicting abnormalities of static systems.

Thus, the preamble recitation is clearly definite and particular as to how the corresponding independent claims must accommodate the same.

In addition, the Office Action also points out that "[t]he preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone." Citing In re Hiraio, 190 USPQ 15 (CCPA 1976); and Kropa v. Robie, USPQ 478 (CCPA 1951).

However, In re Hiraio merely discusses a case where a preamble clearly sets forth an intended use or "purpose of the process; the remainder of the claim (the three process steps) does not depend on the preamble for completeness, and the process steps are able to stand alone." Citing Kropa v. Robie, which also particularly sets forth that a claimed feature in the preamble may be a vital term and that "the meaning must be taken from the application in which the counts originated."

Further, claim limitations are to be interpreted in light of its broadest reasonable interpretation. In re Prater, 162 USPQ 541, 550-51 (CCPA 1969), cited with approval, In re Morris, 44 USPQ2d 1023, 1028 (Fed. Cir. 1997). The claims should be interpreted in light of their *plain meaning* as understood by one of ordinary skill in the art. In re Zletz, 13 USPQ2d

1320, 1322 (Fed. Cir. 1989), citing, In re Prater. However, the broadest reasonable interpretation must also conform to the broadest reasonable interpretation afforded by one of ordinary skill in the art when read in light of the specification. In re Prater, 162 USPQ 541, 550-51, In re Morris, 44 USPQ2d at 1027, MPEP 2111.01 (7th Ed., rev. 1)(Feb. 2000).

Consequently, as is clear from MPEP §2111.02, if functional features recited in the preamble give life to the claimed invention or thereby limit the structure, then the claimed features must be given sufficient weight, searched, and addressed in any rejection of the claim.

Thus, in addition to the citations presented by the Examiner, the MPEP and the current case law sets forth that claimed features, including those in the preamble, given the broadest reasonable interpretation, must also conform to the broadest reasonable interpretation afforded by one of ordinary skill in the art when read in light of the specification.

It is noted that this requirement is similarly presented in Kropa v. Robie, cited by the Examiner in the Advisory Action. Id at 481.

Thus, the review of whether the preamble recitation gives life to the claimed invention or thereby limits structure thereof must also take into consideration the "broadest reasonable interpretation afforded by one of ordinary skill in the art when read in light of the specification."

Here, the independent claims include preambles that particularly require the structure thereof, or recited methods, to have the capability to accomplish the claimed preamble recitations.

For example, independent claim 1 sets forth the requirements that the underlying apparatus must be capable to: (a) predict an abnormality of a dynamic system; and (b) implement an action opposing the abnormality using "a continuous information flow that describes a development of a predictability of several future system states."

The body of independent claim 1 sets forth a measured data pick-up, a processor unit, and an actuator that implements the set forth actions. However, the preamble further requires the apparatus to implement "an action opposing the abnormality using 'a continuous information flow that describes a development of a predictability of several future system states.'"

These features of the preamble further limit the underlying structure of the apparatus or add additional process steps of a recited method and therefore give live to the independent claims, each as a whole.

Proper Reasonable Interpretation

In addition, as noted above, the claimed features must be given the "broadest "reasonable" interpretation afforded by one of ordinary skill in the art when read in light of the specification.

As noted above, the claims should be interpreted in light of their *plain meaning* as understood by one of ordinary skill in the art. This concept is further supported by the Kropa v. Robie, where the term "abrasive article" was given its plain meaning. Also see In re Van Geuns, where the court interpreted the phrase "uniform magnetic field." In re Van Geuns at 1059. The terms "uniform" and "magnetic field" have clear meanings in the art, and a combination of the same can easily have a plain meaning easily understood.

However, in the present application, the preamble has set forth particular requirements of the underlying structure or process, including "an action opposing the abnormality using 'a continuous information flow that describes a development of a predictability of several future system states.'" See independent claim 1.

Here, the recitation would not appear to have a simple clear meaning, as the claim recites "a continuous information flow that describes a development of a predictability of several future states." As evidenced by the previous Office Actions, the present Advisory Action, and the reliance on a reference that merely uses the term "information flow" in passing, unrelated to that disclosed in the present application or as commonly understood in the field, it is clear that the phrases "continuous information flow" or "continuous information flow that describes a development of a predictability of several states," would not appear to have clear simple meanings, thereby requiring a review of the specification and the related art to determine the meaning of the same.

Specification "Information Flow" Definition

Regarding the claimed "information flow," which would not appear to have any clear meaning alone, absent the disclosure of the application, the Advisory Action merely states that "[a]lthough the claims are interpreted in light of the specification, limitations [from] the specification are not read into the claims."

Previously, applicant had particularly explained how the present application defines "information flow," as well as how those skilled in the art would reasonably understand the same to mean, when read in view of the present disclosure. However, as noted above, the Advisory

Action merely discards this support and has generated a separate interpretation of "information flow" consistent with the overall rejection rationale.

As the Advisory Action, as well as the outstanding Office Action, would appear to be resistant to accord the claimed term "information flow" an interpretation consistent with the specification, the following is again noted.

Honeywell Inc. v. Victor Co. of Japan Ltd., 63 USPQ2d 1904 (CA FC 2002) "The district court erred in not according more weight to the inventor's definition. It is well settled that a ***patentee may define a claim term either in the written description of the patent or, as in the present case, in the prosecution history.*** Mycogen Plant Science v. Monsanto Co., 243 F.3d 1316, 1327, 58 USPQ2d 1030, 1039 (Fed. Cir. 2001). Frequently, a definition offered during prosecution is made in response to a rejection, and is entered in conjunction with a narrowing amendment. See, e.g., Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576, 34 USPQ2d 1673, 1677 (Fed. Cir. 1995). Such a definition limits the scope of the claim, preventing the patentee from later recapturing what was previously surrendered.

Although the inventor's definition does not have a narrowing effect, it is nonetheless relevant in indicating the meaning that the inventor ascribed to the term. See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582, 39 USPQ2d 1573, 1577 (Fed. Cir. 1996) ('[T]he record before the Patent and Trademark Office is often of critical significance in determining the meaning of the claims.'). E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1438, 7 USPQ2d 1129, 1135 (Fed. Cir. 1988) (**prosecution history 'must be examined to ascertain the true meaning of what the inventor intended to convey in the claims'**) Honeywell Inc. v. Victor Co. of Japan Ltd., 63 USPQ2d 1904 (CA FC 2002).

Thus, the previous response particularly pointed out support in the present application, as well as articles provided in an information disclosure, both of which clearly define the claimed "information flow."

The Advisory Action briefly comments that because these references are not incorporated by reference, they will not be used to interpret the claimed "information flow." However, as noted above, the previous responses particularly linked the definition of "information flow" in the present application with these references, and such a link must be considered.

As pointed out in the previous response, the claimed "information flow" is at least a

characterization of a dynamic behavior (including statistical dependencies between past and future points in time) of a complex system. Neither Ravdin et al. nor Smyth disclose such a claimed information flow, and as the outstanding rejections rely on a contrary interpretation of "information flow," compared to that defined in the present application, the outstanding rejections fail to set forth prima facie obviousness cases.

Summary

In putting all these pieces together, preamble features in the independent claims particularly impose on the underlying structure and processes additional constraints, thereby requiring the same be considered and reviewed when making the determination of patentability.

Further, in this same analysis, when the claim terms in the preamble are easily understood or are clear on their face, not much additional review of their meaning is necessary. But, when a claimed features is not clear on it's face, the specification must be reviewed to decipher the true meaning of the same. What is required is that an interpretation of the claimed feature be "reasonable" when read in light of the specification.

The independent claim include defining features in their respective preambles, in addition to features that require a review of the specification to discern their true meaning. In contradiction to these MPEP and Federal Circuit principles, the outstanding Office Action and Advisory Action have not given the aforementioned preamble features sufficient patentable weight and has not accorded the term "information flow" a proper interpretation, in view of the specification and submitted references setting forth consistent definitions.

CONCLUSION

There being no further objections or rejections, it is submitted that the application is in condition for allowance, which action is courteously requested.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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